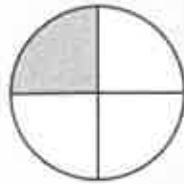


NS4-45 Naming Fractions

The area is cut into 4 equal parts.

1 part out of 4 is shaded.

$\frac{1}{4}$ of the area is shaded.

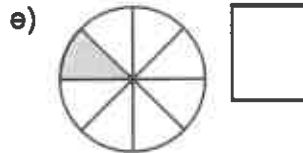
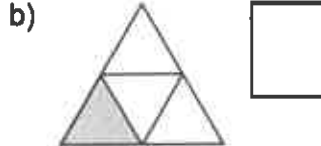


$\frac{1}{4}$

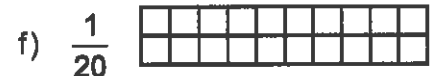
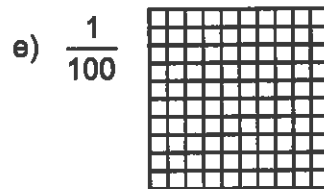
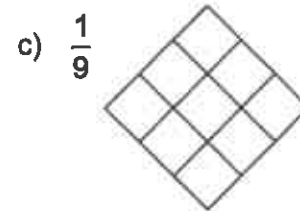
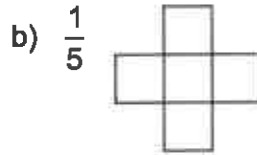
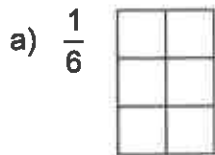
The **numerator** (1) tells you one part is shaded.

The **denominator** (4) tells you how many equal parts are in a whole.

1. Write the fraction shown by the shaded part of the image.



2. Shade the fraction.



3. Write the words that describe each square in the figure.

one fourth

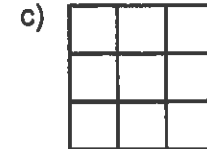
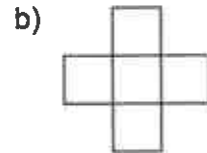
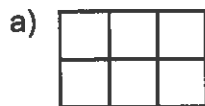
one fifth

one sixth

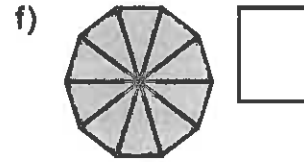
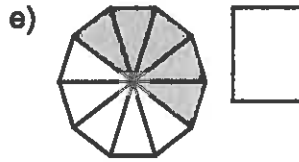
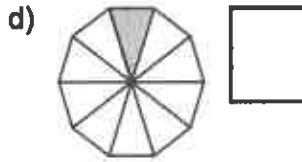
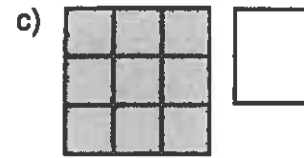
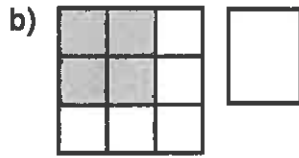
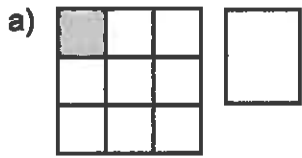
one seventh

one eighth

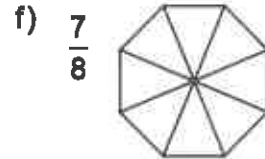
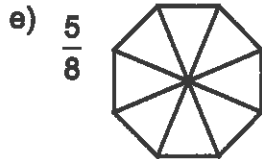
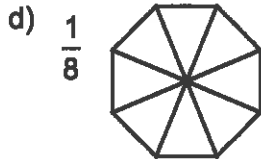
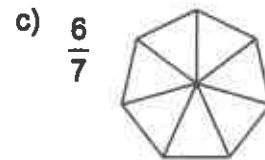
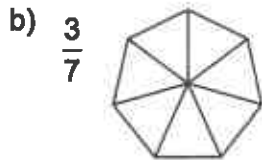
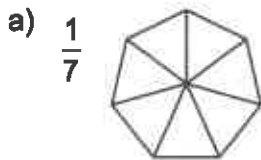
one ninth



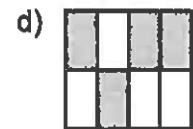
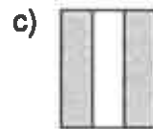
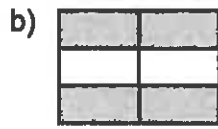
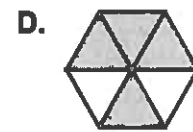
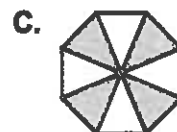
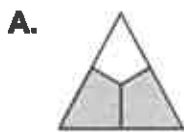
4. Write the fraction shown by the shaded part of the figure.



5. Shade the fraction.



6. Find a fraction in the top row that is equal to a fraction in the bottom row. Fill in the blank with the letter from the fraction in the top row.

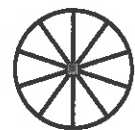
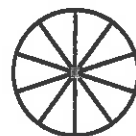


7. Shade the fraction twice. Put a \checkmark under the figure with the larger amount of shading.

a) $\frac{1}{10}$

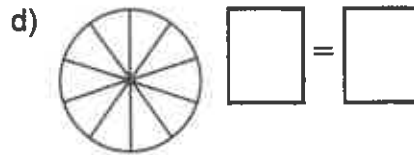
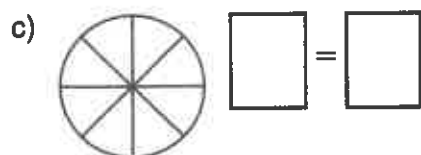
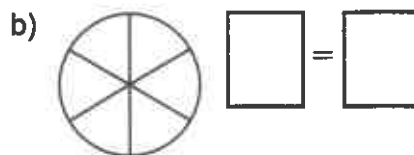
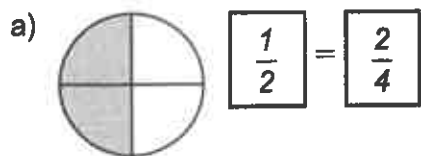
b) $\frac{4}{10}$

c) $\frac{7}{10}$

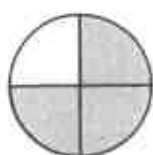


NS4-46 Comparing Fractions to Benchmarks

1. Shade half of the figure. Write two fractions to describe the shaded part.



2. Circle the fractions that are more than half.



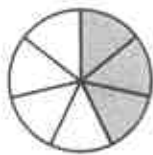
$\frac{3}{4}$



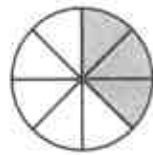
$\frac{3}{5}$



$\frac{3}{6}$



$\frac{3}{7}$



$\frac{3}{8}$

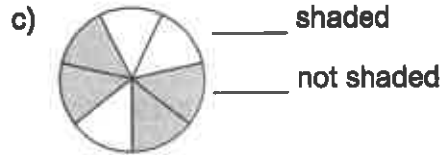
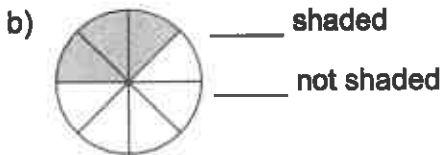
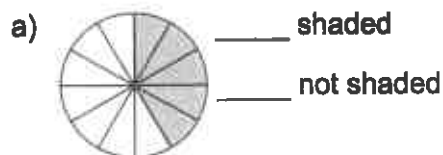
Is $\frac{3}{5}$ more than $\frac{1}{2}$ or less than $\frac{1}{2}$?



There are 5 parts altogether. $5 - 3 = 2$ parts are not shaded.

When more parts are shaded than not shaded, the fraction is greater than $\frac{1}{2}$, so $\frac{3}{5} > \frac{1}{2}$.

3. How many shaded parts does the fraction show? How many parts are not shaded?



4. Write $>$ or $<$.

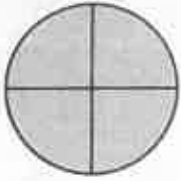
- a) $\frac{2}{5} \square \frac{1}{2}$ b) $\frac{4}{9} \square \frac{1}{2}$ c) $\frac{6}{11} \square \frac{1}{2}$ d) $\frac{13}{25} \square \frac{1}{2}$ e) $\frac{23}{50} \square \frac{1}{2}$ f) $\frac{5}{11} \square \frac{1}{2}$

5. Karen drank $\frac{3}{8}$ of a bottle of milk. Ella drank $\frac{6}{11}$ of it. Who drank more milk?

Hint: Compare the fractions to $\frac{1}{2}$. $\underline{\hspace{2cm}}$

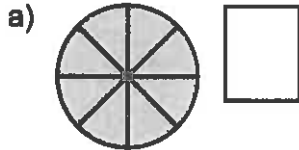
6. Glen ran around $\frac{3}{5}$ of a track. Yu ran around $\frac{1}{3}$ of it. Who ran farther? $\underline{\hspace{2cm}}$

Rob really likes pizza! The pizza has 4 slices, and Rob ate 4 slices:



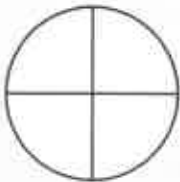
Rob ate $\frac{4}{4}$ of a pizza. Rob ate 1 pizza.

7. Write the shaded fraction.



8. A fraction is equal to 1 if its numerator and denominator are _____.

Rob does not like this pizza at all! The pizza has 4 slices, and Rob ate 0 slices:



Rob ate $\frac{0}{4}$ of a pizza. Rob ate none of the pizza.

9. Write if the fraction is "equal to" or "greater than" 0.

a) The fraction is _____ 0. b) The fraction is _____ 0.

10. A fraction is equal to 0 if its numerator is _____.

11. Shade two different fractions between 0 and $\frac{1}{2}$, and then write the fractions.



12. Shade two different fractions between $\frac{1}{2}$ and 1, and then write the fractions.



NS4-47 Equivalent Fractions

1. How many times as many parts are there?

a)  has _____ times as many parts as .

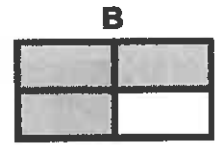
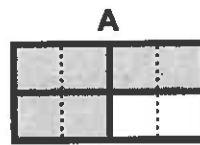
b)  has _____ times as many parts as .

c)  has _____ times as many parts as .

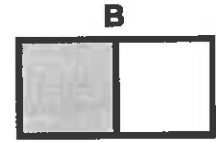
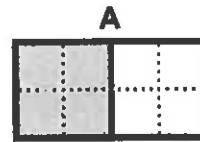
d)  has _____ times as many parts as .

2. Fill in the blanks.

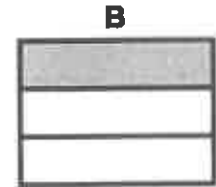
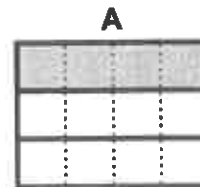
a) A has _____ times as many parts as B.
A has _____ times as many shaded parts as B.



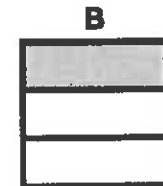
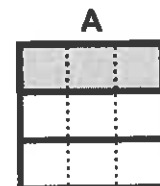
b) A has _____ times as many parts as B.
A has _____ times as many shaded parts as B.



c) A has _____ times as many parts as B.
A has _____ times as many shaded parts as B.



d) A has _____ times as many parts as B.
A has _____ times as many shaded parts as B.

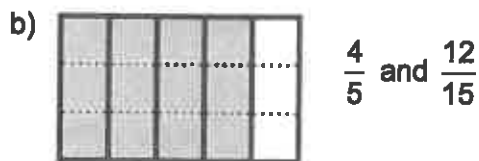


3. The picture shows two equivalent fractions. Fill in the blanks.



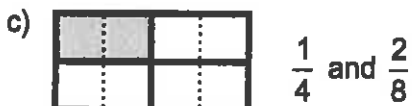
2 is _____ times as much as 1.

10 is _____ times as much as 5.



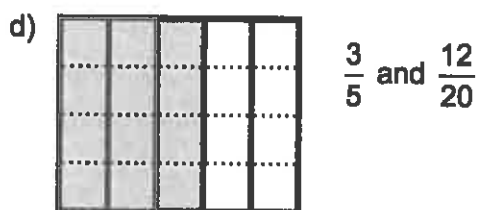
12 is _____ times as much as 4.

15 is _____ times as much as 5.



2 is _____ times as much as 1.

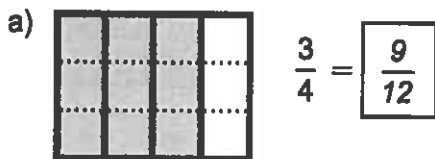
8 is _____ times as much as 4.



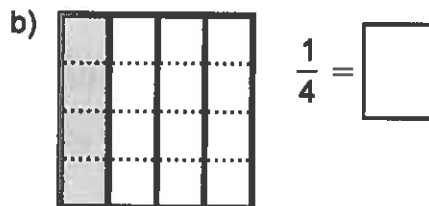
12 is _____ times as much as 3.

20 is _____ times as much as 5.

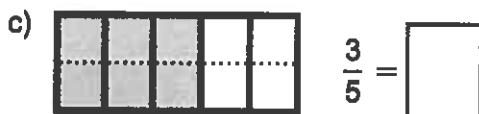
4. Write an equivalent fraction for the picture. Then write how many times as much the new numerator and denominator are.



_____ times as much

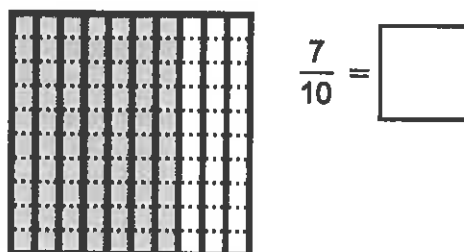


_____ times as much



_____ times as much

BONUS ▶



_____ times as much

To get an equivalent fraction, multiply the numerator and denominator by the same number.

Example:

Picture A



$$\begin{array}{l} 3 \xrightarrow{\times 2} 6 \\ \hline 4 \xrightarrow{\times 2} 8 \end{array}$$

Picture B

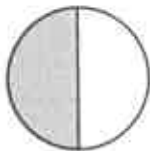


Picture B has twice as many parts as Picture A.

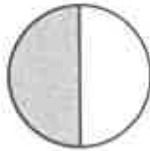
Picture B has twice as many shaded parts as Picture A.

5. Draw lines to cut the pies into more equal pieces. Then fill in the numerators of the equivalent fractions.

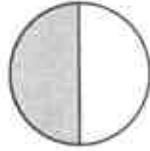
a)



4 pieces



6 pieces



8 pieces

$$\frac{1}{2} = \frac{\quad}{4} = \frac{\quad}{6} = \frac{\quad}{8}$$

b)



6 pieces



9 pieces



12 pieces

$$\frac{1}{3} = \frac{\quad}{6} = \frac{\quad}{9} = \frac{\quad}{12}$$

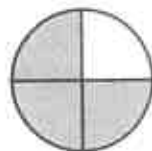
6. Draw lines to cut the pie into more pieces. Then fill in the missing numbers.

a)



$$\begin{array}{l} 2 \xrightarrow{\times 2} \quad \\ \hline 3 \xrightarrow{\times 2} 6 \end{array}$$

b)



$$\begin{array}{l} 3 \xrightarrow{\quad} \quad \\ \hline 4 \xrightarrow{\quad} 8 \end{array}$$

c)



$$\begin{array}{l} 2 \xrightarrow{\quad} \quad \\ \hline 3 \xrightarrow{\quad} 9 \end{array}$$

This number tells you how many pieces to cut each slice into.

7. Use multiplication to find the equivalent fraction.

a) $\frac{1 \times 2}{3 \times 2} = \frac{\quad}{6}$

b) $\frac{1 \times \quad}{2 \times \quad} = \frac{\quad}{10}$

c) $\frac{2}{5} = \frac{\quad}{10}$

d) $\frac{3}{4} = \frac{\quad}{8}$

e) $\frac{1}{4} = \frac{\quad}{12}$

f) $\frac{4}{5} = \frac{\quad}{15}$

g) $\frac{5}{6} = \frac{\quad}{12}$

h) $\frac{3}{10} = \frac{\quad}{100}$

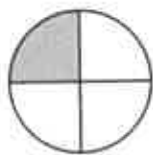
i) $\frac{5}{9} = \frac{\quad}{72}$

8. Write five fractions equivalent to $\frac{2}{3}$.

$$\frac{2}{3} = \boxed{\quad} = \boxed{\quad} = \boxed{\quad} = \boxed{\quad} = \boxed{\quad}$$

NS4-48 Comparing and Ordering Fractions

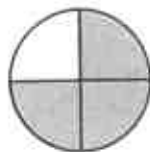
1. a) Write the numerators of the shaded fractions.



$\frac{\quad}{4}$



$\frac{\quad}{4}$



$\frac{\quad}{4}$

b) Look at the pictures and fractions in part a) from left to right. Write "increases," "decreases," or "stays the same."

i) Numerator _____

ii) Denominator _____

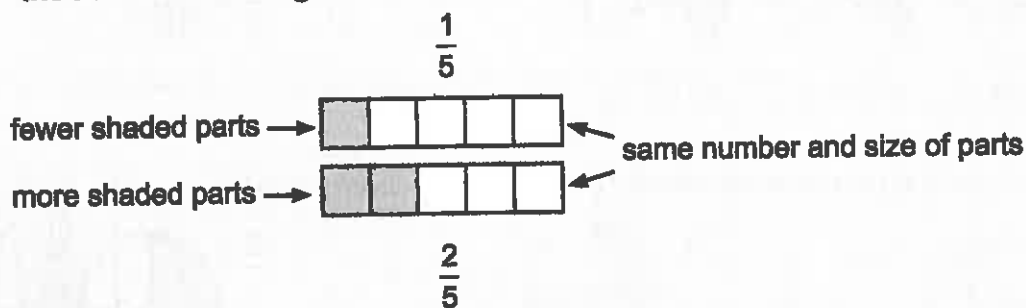
iii) Shaded fraction _____

Comparing fractions when ...

the numerator changes

and

the denominator stays the same



So $\frac{2}{5} > \frac{1}{5}$ because more parts are shaded.

2. Circle the greater fraction.

a) $\frac{2}{5}$ or $\frac{4}{5}$

b) $\frac{3}{4}$ or $\frac{1}{4}$

c) $\frac{4}{10}$ or $\frac{9}{10}$

d) $\frac{3}{3}$ or $\frac{1}{3}$

3. Write any number in the blank that makes the relationship correct.

a) $\frac{3}{7} > \frac{1}{7}$

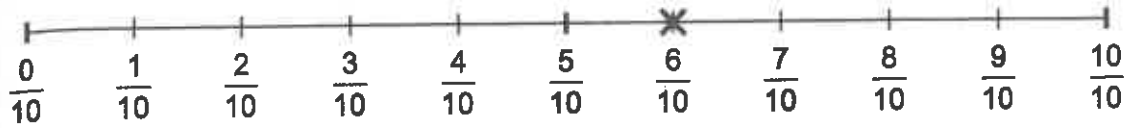
b) $\frac{\quad}{29} < \frac{14}{29}$

c) $\frac{61}{385} > \frac{\quad}{385}$

BONUS $\frac{\quad}{1000} < \frac{2}{1000}$

4. Two fractions have the same denominator but different numerators. How can you tell which fraction is greater?

5. Use the number line to order the fractions from least to greatest.
Draw an **X** to mark the position of each fraction.



$$\frac{6}{10} \quad \frac{1}{10} \quad \frac{8}{10} \quad \frac{4}{10} \quad \frac{2}{10} \quad \frac{9}{10} \quad \frac{5}{10} \quad \square < \square < \square < \square < \square < \square < \square$$

6. Order the fractions from least to greatest by considering the numerators and denominators.

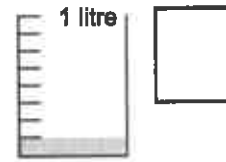
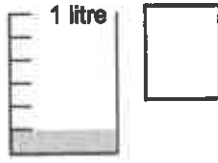
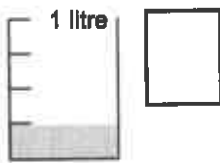
a) $\frac{3}{5} \quad \frac{0}{5} \quad \frac{2}{5} \quad \frac{5}{5} \quad \frac{1}{5}$

b) $\frac{6}{10} \quad \frac{1}{10} \quad \frac{4}{10} \quad \frac{2}{10} \quad \frac{9}{10}$

$$\square < \square < \square < \square < \square$$

$$\square < \square < \square < \square < \square$$

7. a) What fraction of a litre is in the container?



- b) Which fraction in part a) is ...

i) the smallest? \square

ii) the biggest? \square

iii) in the middle? \square

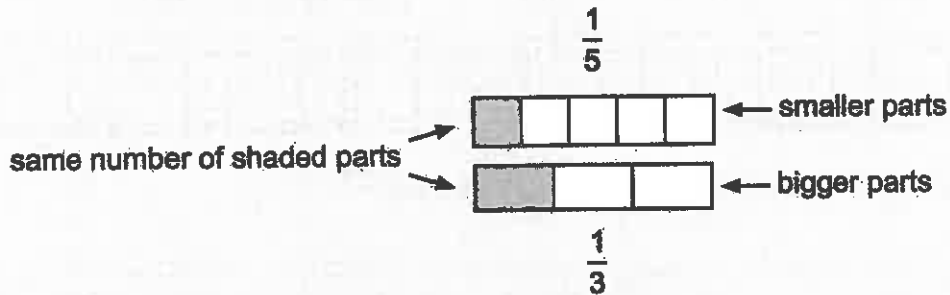
- c) Write "smaller" or "bigger." As the denominator gets bigger, each part gets _____.

Comparing fractions when ...

the numerator stays the same

and

the denominator changes



So $\frac{1}{5} < \frac{1}{3}$ because the parts are smaller in the shape with more parts.

8. Circle the greater fraction.

a) $\frac{2}{5}$ or $\frac{2}{3}$

b) $\frac{3}{4}$ or $\frac{3}{5}$

c) $\frac{4}{5}$ or $\frac{4}{10}$

d) $\frac{3}{4}$ or $\frac{3}{3}$

9. Write any number in the blank that makes the relationship correct.

a) $\frac{3}{5} > \frac{\quad}{8}$

b) $\frac{\quad}{15} > \frac{14}{29}$

c) $\frac{9}{16} > \frac{9}{\quad}$

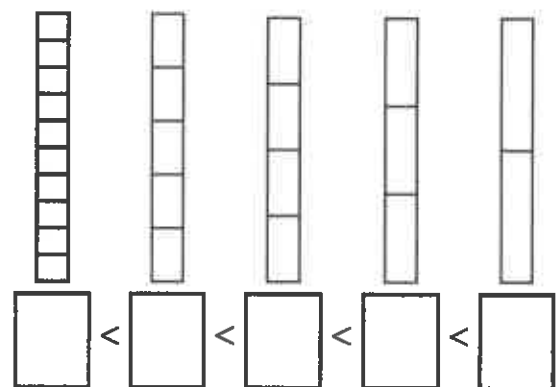
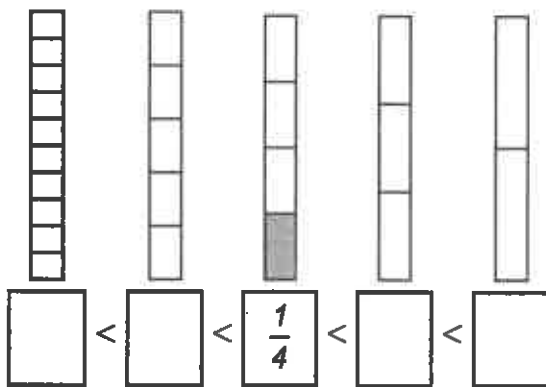
d) $\frac{20}{\quad} < \frac{20}{27}$

10. Two fractions have the same numerator but different denominators. How can you tell which fraction is greater?

11. a) Order the fractions from least to greatest by matching each fraction to the strip it represents and then shading it.

i) $\frac{1}{4}$ $\frac{1}{10}$ $\frac{1}{2}$ $\frac{1}{5}$ $\frac{1}{3}$

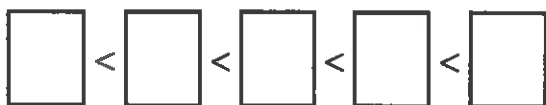
ii) $\frac{2}{2}$ $\frac{2}{4}$ $\frac{2}{10}$ $\frac{2}{3}$ $\frac{2}{5}$



b) Order the fractions from least to greatest by considering the numerators and denominators.

i) $\frac{1}{4}$ $\frac{1}{10}$ $\frac{1}{2}$ $\frac{1}{5}$ $\frac{1}{3}$

ii) $\frac{2}{2}$ $\frac{2}{4}$ $\frac{2}{10}$ $\frac{2}{3}$ $\frac{2}{5}$



c) Are your answers for parts a) and b) the same? Explain.

12. Randi says that $\frac{1}{2}$ of a pie is less than $\frac{1}{10}$ of a pie. Is she correct? Explain.

13. Ray, Hanna, and Lynn each brought 1 cake to school for their year-end class party. None of the cakes are the same size. The teacher cut each cake into 8 equal pieces, so everyone in the class can have a piece. Ray says, "That's not fair at all!" and Lynn says, "That's perfectly fair!"

a) Why does Ray think it's unfair?

b) Why does Lynn think it's fair?

14. a) Write the fractions in the correct category.

$$\frac{3}{4}$$

$$\frac{1}{3}$$

$$\frac{2}{5}$$

$$\frac{4}{6}$$

$$\frac{4}{9}$$

$$\frac{3}{7}$$

$$\frac{7}{8}$$

$$\frac{6}{10}$$

$$\frac{3}{4}$$

$$\frac{2}{3}$$

$$\frac{1}{6}$$

$$\frac{3}{10}$$

0 to $\frac{1}{2}$	$\frac{1}{2}$ to 1
	$\frac{3}{4}$

b) Use the results from part a) to write "<" or ">" in the box between the pair of fractions.

i) $\frac{6}{10}$ $\frac{3}{7}$

ii) $\frac{1}{3}$ $\frac{3}{4}$

iii) $\frac{4}{6}$ $\frac{4}{9}$

iv) $\frac{2}{5}$ $\frac{7}{9}$

v) $\frac{2}{3}$ $\frac{3}{10}$

vi) $\frac{3}{7}$ $\frac{7}{8}$

vii) $\frac{5}{9}$ $\frac{1}{3}$

viii) $\frac{4}{9}$ $\frac{3}{4}$

NS4-49 Equal Parts of a Set

Fractions can name parts of a set:

$\frac{1}{5}$ of the figures are squares, $\frac{1}{5}$ are circles, and $\frac{3}{5}$ are triangles.



1. Write fractions in the blanks.



of the figures are circles.

of the figures are shaded.



of the figures are shaded.

of the figures are triangles.



a) $\frac{5}{8}$ of the figures are _____

b) $\frac{3}{8}$ of the figures are _____

3. A soccer team wins 5 games and loses 3 games.

a) How many games did the team play? _____

b) What fraction of the games did the team win?

4. A box contains 4 blue markers, 3 black markers, and 3 red markers.
What fraction of the markers are not blue? You can make a picture to help.

5. Write four fraction statements for the picture:

6. Draw a picture that fits all the clues.

a) There are 5 circles and squares.

$\frac{3}{5}$ of the figures are squares.

$\frac{2}{5}$ of the figures are shaded.

Two circles are shaded.

b) There are 5 triangles and squares.

$\frac{3}{5}$ of the figures are shaded.

$\frac{2}{5}$ of the figures are triangles.

One square is shaded.

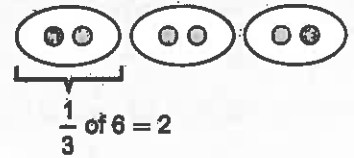
NS4-50 Fractions of Whole Numbers

Don has 6 cookies.

He wants to give $\frac{1}{3}$ of his cookies to a friend.

He makes 3 equal groups and gives 1 group to his friend.

There are 2 cookies in each group, so $\frac{1}{3}$ of 6 is 2.



1. Use the picture to find the fraction of the number.

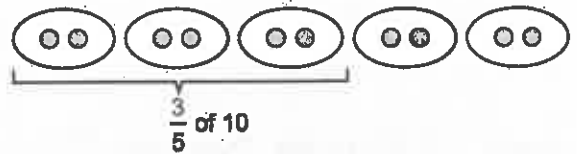
a) $\frac{1}{2}$ of 6 is 3

b) $\frac{1}{3}$ of 12 is ____

c) of 8 is ____

d) of 8 is ____

Tina has 10 cookies. She wants to give $\frac{3}{5}$ of her cookies to a friend. She makes 5 equal groups and gives 3 of the groups to her friend.



There are 2 in each group. So there are 6 in 3 groups. So $\frac{3}{5}$ of 10 is 6.

2. Circle the given amount.

a) $\frac{2}{3}$ of 6

b) $\frac{3}{4}$ of 8

c) $\frac{4}{5}$ of 10

d) $\frac{3}{4}$ of 12

3. Draw the correct number of dots in each group, and then circle the given amount.

a) $\frac{2}{3}$ of 12

b) $\frac{2}{3}$ of 9

4. Draw a picture to find $\frac{3}{4}$ of 12 cookies.

Tristan finds $\frac{1}{3}$ of 6 by dividing: 6 divided into 3 equal groups is 2 in each group.



$6 \div 3 = 2$ So $\frac{1}{3}$ of 6 is 2.

5. Find the fraction of the number. Write the division you used in the box.

a) $\frac{1}{2}$ of 8 = 4

$8 \div 2$

b) $\frac{1}{2}$ of 10 = _____

c) $\frac{1}{2}$ of 16 = _____

d) $\frac{1}{2}$ of 20 = _____

e) $\frac{1}{3}$ of 9 = _____

f) $\frac{1}{3}$ of 15 = _____

BONUS $\frac{1}{1000}$ of 4000 = _____

6. Circle $\frac{1}{2}$ of the set of lines. Hint: Count the lines and divide by 2.



7. Shade $\frac{1}{3}$ of the circles. Then circle $\frac{2}{3}$.



8. Shade $\frac{1}{4}$ of the triangles. Then circle $\frac{3}{4}$.



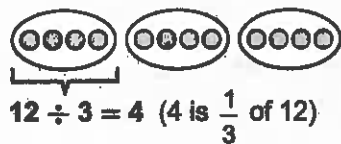
9. Shade $\frac{3}{5}$ of the boxes. Hint: First count the boxes and find $\frac{1}{5}$.

a)

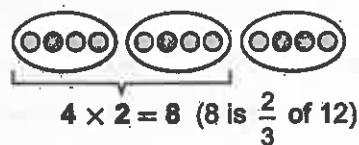
b)

Ansel finds $\frac{2}{3}$ of 12 as follows:

Step 1: He finds $\frac{1}{3}$ of 12 by dividing 12 by 3:



Step 2: He multiplies the result by 2:



10. Find the amount using Ansel's method.

a) $\frac{2}{3}$ of 9

b) $\frac{3}{4}$ of 8

c) $\frac{2}{3}$ of 15

d) $\frac{2}{5}$ of 10

$\frac{1}{3}$ of 9 is _____

$\frac{1}{4}$ of 8 is _____

$\frac{1}{3}$ of 15 is _____

$\frac{1}{5}$ of 10 is _____

So $\frac{2}{3}$ of 9 is _____.

So $\frac{3}{4}$ of 8 is _____.

So $\frac{2}{3}$ of 15 is _____.

So $\frac{2}{5}$ of 10 is _____.

e) $\frac{3}{5}$ of 25

f) $\frac{2}{7}$ of 14

g) $\frac{1}{6}$ of 18

h) $\frac{1}{2}$ of 12

i) $\frac{3}{4}$ of 12

j) $\frac{2}{3}$ of 21

k) $\frac{3}{8}$ of 16

l) $\frac{3}{7}$ of 21

11. Five children are on a bus. $\frac{3}{5}$ are girls. How many girls are on the bus? _____

12. One kilogram of plums costs \$8. How much would $\frac{3}{4}$ of a kilogram cost? _____

13. Josh has 12 apples. He gave away $\frac{3}{4}$ of the apples. How many did he keep? _____

BONUS ▶ Karen has 120 stamps. She gave away $\frac{3}{4}$ of the stamps.

How many did she keep? _____

NS4-51 Fraction Word Problems

1. $\frac{5}{9}$ of the community pool is reserved for swimming lengths. What fraction of the pool is not reserved for swimming lengths?

2. A pitcher of fruit drink is made by mixing water and canned orange juice.

a) If $\frac{1}{4}$ of the fruit drink is canned orange juice, what fraction of the drink is water?

b) How would the taste of the fruit drink change if $\frac{1}{2}$ of it were canned orange juice instead of $\frac{1}{4}$?

c) If you added some club soda to a glass of fruit drink, would the fraction of canned juice in the glass of fruit drink get bigger or smaller? Explain.

3. The picture represents a set of stickers.



a) What are two examples of $\frac{4}{9}$ of the stickers? _____

b) What fraction of the stickers are quadrilaterals (have exactly four sides)?

c) What fraction of the quadrilaterals do not have four equal sides?

d) What other group can be represented with the same fraction as in c)?

4. The picture represents the fraction of Earth's surface that is covered by water.

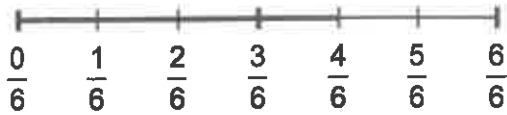


a) What fraction of Earth's surface is covered by water (shaded)?

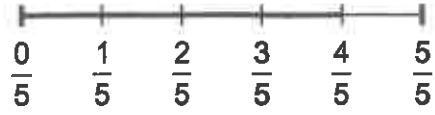
b) What fraction of Earth's surface is not covered by water?

c) Which is there more of, Earth's surface with water or without water? _____

5. Lela and Ray went to the park. The pictures represent the fraction of time each spent on the swings.



Lela



Ray

- a) What fraction of the time at the park did Lela spend on the swings?
- b) What fraction of the time at the park did Ray spend on the swings?
- c) Who spent more time on the swings? _____

6. A teacher is going to order 10 pizzas for a year-end party. More than half of the pizzas must be vegetarian.

- a) Will there be enough vegetarian pizzas if 3 are vegetarian? _____
- b) Will there be enough vegetarian pizzas if 6 are vegetarian? _____
- c) If 6 pizzas are vegetarian, what fraction of the pizzas are not vegetarian?
- d) Give another example of a fraction that would have enough vegetarian pizzas by shading the pizzas below.



7. Soccer Team A won $\frac{3}{9}$ of the games they played this season. Soccer Team B lost $\frac{5}{9}$ of the games they played this season. Soccer Team C won $\frac{3}{5}$ of the games they played this season.

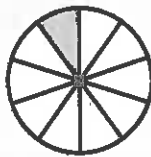
- a) What fraction of their games did Team A lose?
- b) What fraction of their games did Team B win?
- c) What fraction of their games did Team C lose?
- d) Which team won a greater fraction of their games, Team A or Team B? _____
- e) Which team won a greater fraction of their games, Team A or Team C? _____

NS4-52 Decimal Tenths and Place Value

A tenth (or $\frac{1}{10}$) can be represented in different ways.



A tenth of the distance between 0 and 1



A tenth of a pie



A tenth of a square

Mathematicians invented decimal tenths as a short form for tenths: $\frac{1}{10} = 0.1$, $\frac{2}{10} = 0.2$, and so on.

1. Write a fraction and a decimal for the shaded part in the boxes.

a)



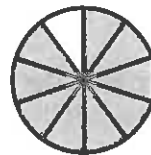
$\frac{4}{10}$

0.4

b)



c)



2. Write the decimal.

a) 5 tenths = 0.5

b) 7 tenths = _____

c) 6 tenths = _____

d) 9 tenths = _____

e) 2 tenths = _____

f) 8 tenths = _____

g) 3 tenths = _____

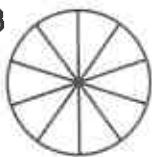
BONUS ▶ 0 tenths = _____

3. Shade to show the decimal.

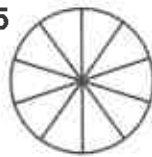
a) 0.3



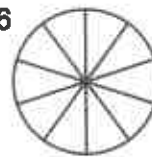
b) 0.8



c) 0.5

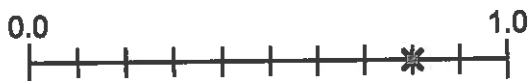


d) 0.6



4. Show the decimal on the number line.

a) 0.8 of the distance from 0.0 to 1.0



b) 0.3 of the distance from 0.0 to 1.0



c) 0.5 of the distance from 0.0 to 1.0



d) 0.9 of the distance from 0.0 to 1.0





5. Write the place value of the underlined digit.

- a) 2.7 ones b) 53.9 _____ c) 107.1 _____
- d) 236.4 _____ e) 4501.8 _____ f) 7334.5 _____
- g) 400.3 _____ h) 921.2 _____ i) 3677.8 _____

6. Write the place value of the digit 3 in the number.
Hint: First underline the 3 in the number.

- a) 2361.9 _____ b) 405.3 _____ c) 713.8 _____
- d) 30.2 _____ e) 3919.1 _____ f) 2854.3 _____
- g) 392.7 _____ h) 1636.2 _____ i) 3544.5 _____

You can also write numbers using a place value chart. Example:

This is the number 7102.8 in a place value chart:

Thousands	Hundreds	Tens	Ones	Tenths
7	1	0	2	8

7. Write the number into the place value chart.

	Thousands	Hundreds	Tens	Ones	Tenths
a) 5227.6	5	2	2	7	6
b) 8053.4					
c) 489.2					
d) 27.8					
e) 9104.5					
f) 8.7					
g) 706.0					
h) 6.1					

In the number 2836.5:

the digit 2 has a value of 2000—the value of the digit 2 is 2000;

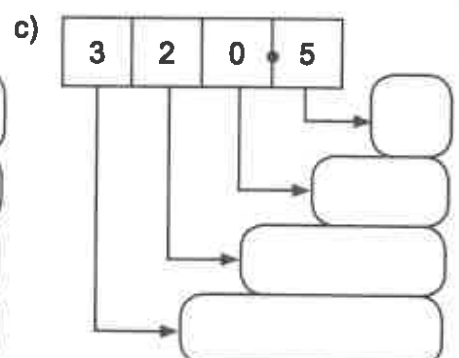
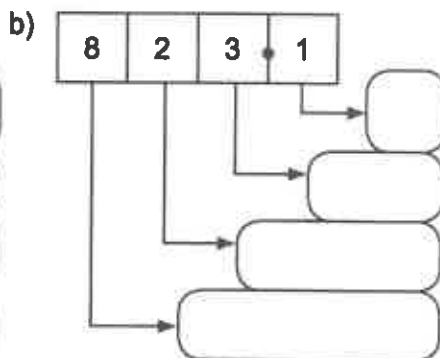
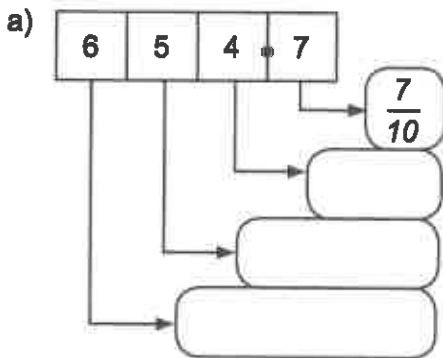
the digit 8 has a value of 800—the value of the digit 8 is 800;

the digit 3 has a value of 30—the value of the digit 3 is 30;

the digit 6 has a value of 6—the value of the digit 6 is 6; and

the digit 5 has a value of $\frac{5}{10}$ —the value of the digit 5 is $\frac{5}{10}$.

8. Write the value of each digit.



9. What value does the digit 7 have in the number?

a) 732.6

b) 4107.9

c) 6171.2

d) 7384.5

e) 9062.7

f) 467.8

g) 1894.7

h) 2744.8

i) 7250.5

j) 6000.7

k) 3975.4

l) 743.1

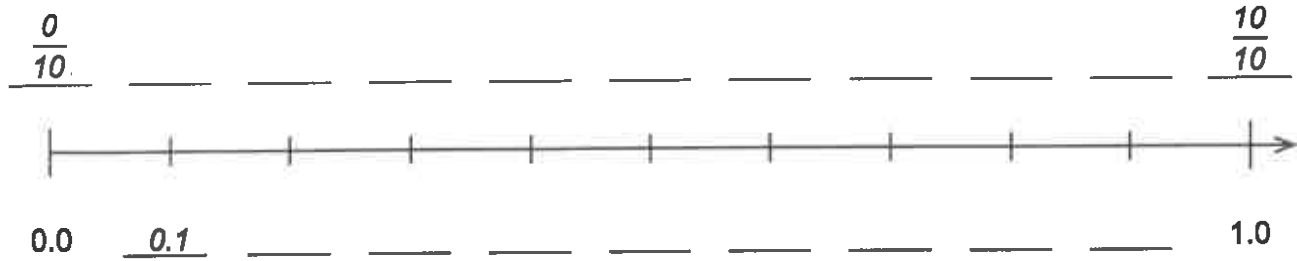
10. Fill in the blank.

- In the number 1969.5, the digit 6 stands for 60.
- In the number 5873.2, the digit 3 stands for 30.
- In the number 7451.3, the value of the digit 7 is 7000.
- In the number 8003.9, the value of the digit 9 is 9000.
- In the number 4855.7, the value of the digit 8 is 8000.
- In the number 9201.4, the digit 1 is in the ones place.
- In the number 3495.6, the digit 3 is in the hundreds place.
- In the number 6467.5, the digit 5 is in the tenths place.

NS4-53 Relating Fractions and Decimals—to Tenths

1. a) Write a fraction in each blank above the number line.

b) Write a decimal in each blank below the number line.



c) Which decimal is equal to the fraction?

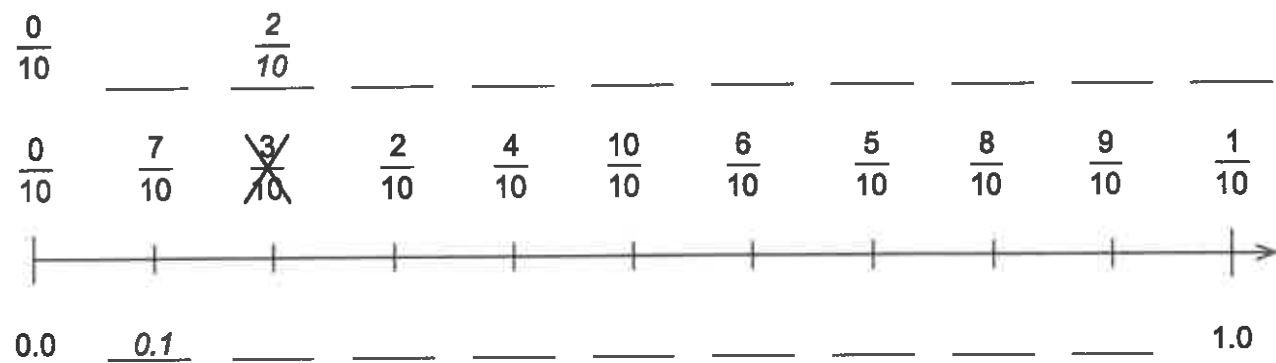
i) $\frac{5}{10} =$ _____

ii) $\frac{10}{10} =$ _____

iii) $\frac{0}{10} =$ _____

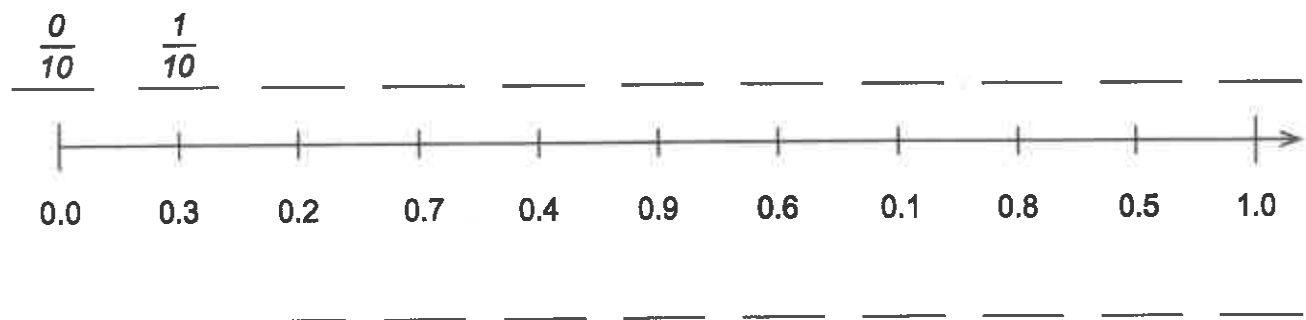
2. a) Write a decimal in each blank below the number line.

b) Cross out each incorrect fraction and write the correct fraction above it.

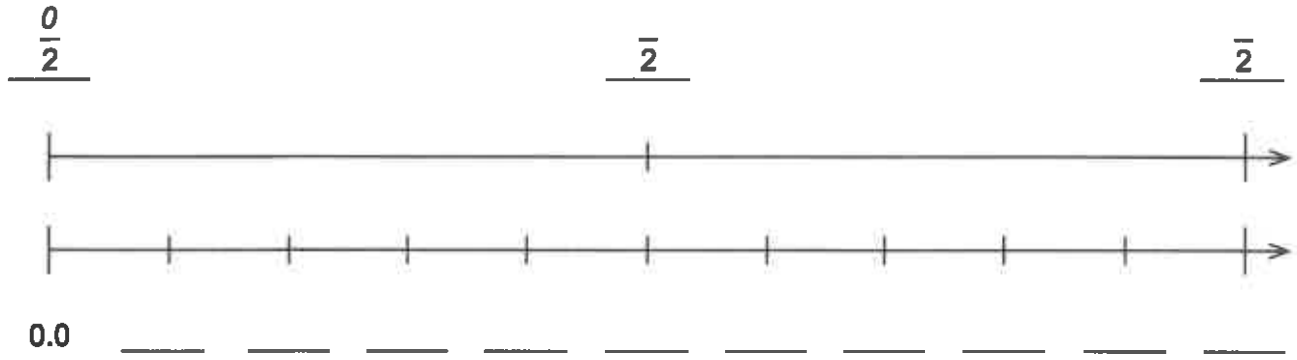


3. a) Write a fraction in each blank above the number line.

b) Cross out each incorrect decimal on the number line and write the correct decimal below it.



4. a) Fill in the missing numerators and decimals on the number lines.



b) Write the decimal that the fraction is equal to.

i) $\frac{0}{2} = 0.0$

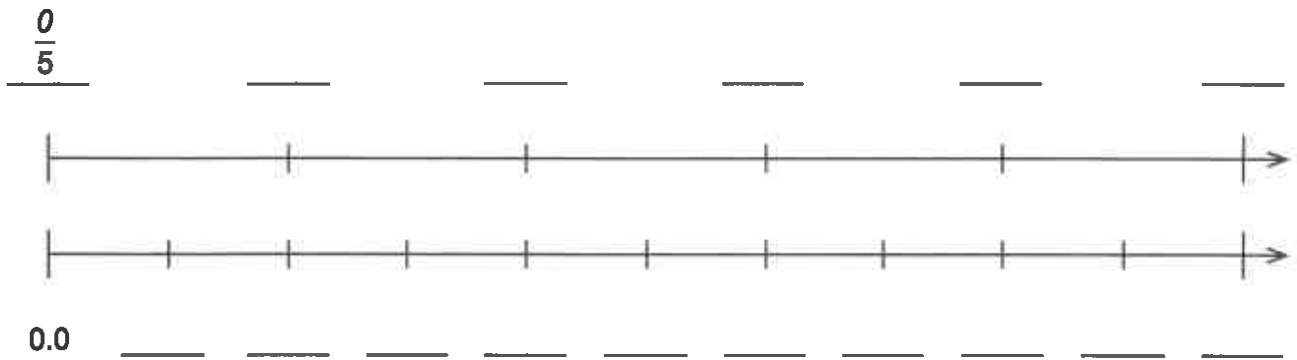
ii) $\frac{1}{2} = \underline{\hspace{2cm}}$

iii) $\frac{2}{2} = \underline{\hspace{2cm}}$

BONUS ▶ Write the decimals that are not equal to any fraction in part b).

0.1 0.2 _____

5. a) Fill in the missing fractions and decimals.



b) Write the decimal the fraction is equal to in part b).

i) $\frac{4}{5} = \underline{\hspace{2cm}}$

ii) $\frac{2}{5} = \underline{\hspace{2cm}}$

iii) $\frac{5}{5} = \underline{\hspace{2cm}}$

iv) $\frac{1}{5} = \underline{\hspace{2cm}}$

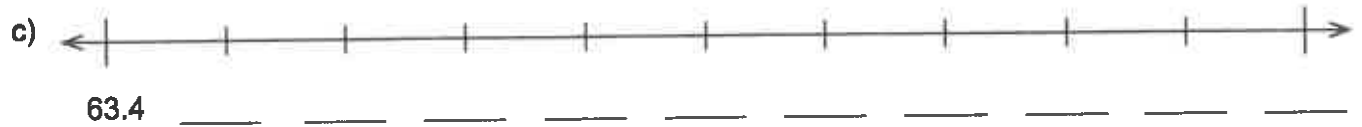
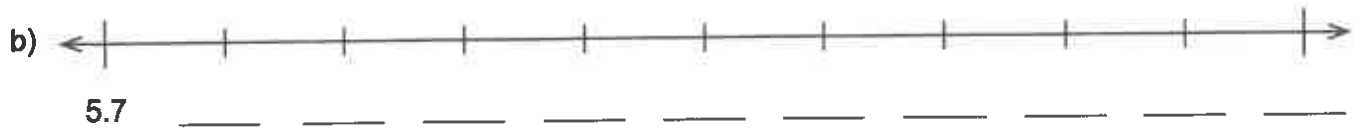
v) $\frac{0}{5} = \underline{\hspace{2cm}}$

BONUS ▶ Write the decimals that are not equal to any fraction in part b).

0.1 0.3 _____

NS4-54 Decimals Greater Than 1—to Tenths

1. Write a decimal in each blank below the number line.



2. a) How are the scales in Question 1 different from each other?

b) How are the scales in Question 1 the same as each other?

You can write a decimal in words. Use “and” for the decimal point.

Examples: $12.3 =$ twelve and three tenths $2.8 =$ two and eight tenths

3. Fill in the missing number word.

a) $3.1 =$ three and one tenth

b) $18.7 =$ eighteen and _____ tenths

c) $6.5 =$ _____ and five tenths

d) $20.8 =$ _____ and eight tenths

4. Write the equivalent words or decimal.

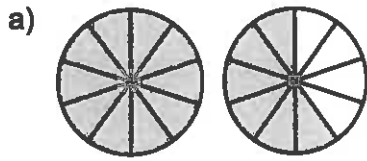
a) $7.4 =$ _____

b) $4.9 =$ _____

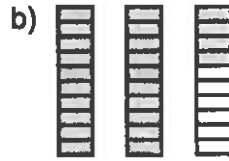
c) nineteen and one tenth = _____

d) sixty-two and four tenths = _____

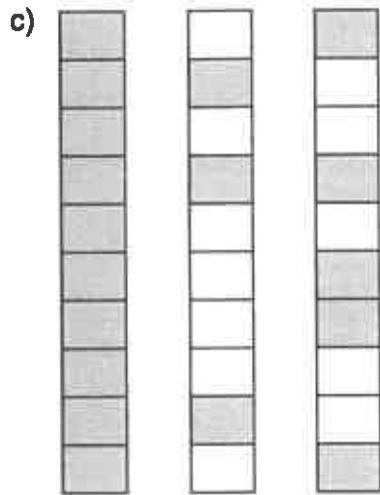
5. Count the shaded tenths. Write the amount two ways.



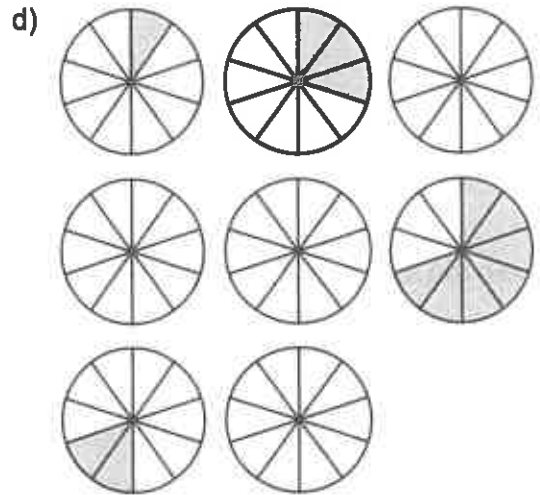
16 tenths = 1.6



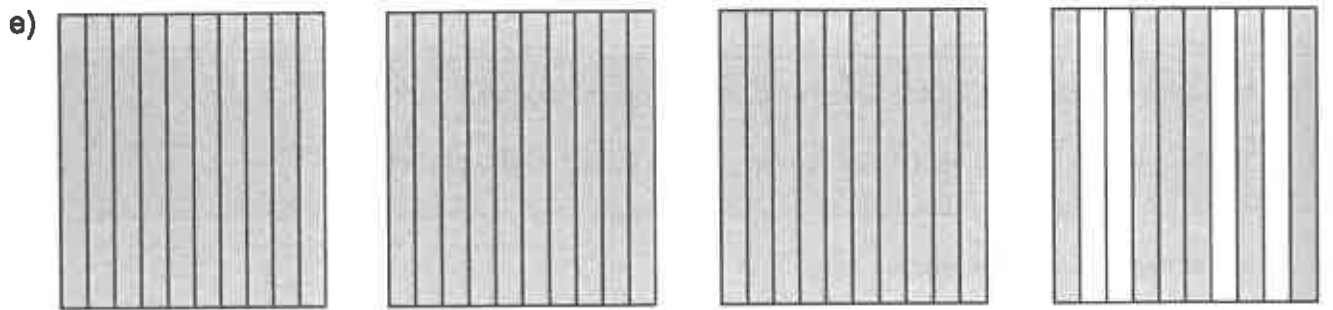
_____ tenths = _____



_____ tenths = _____

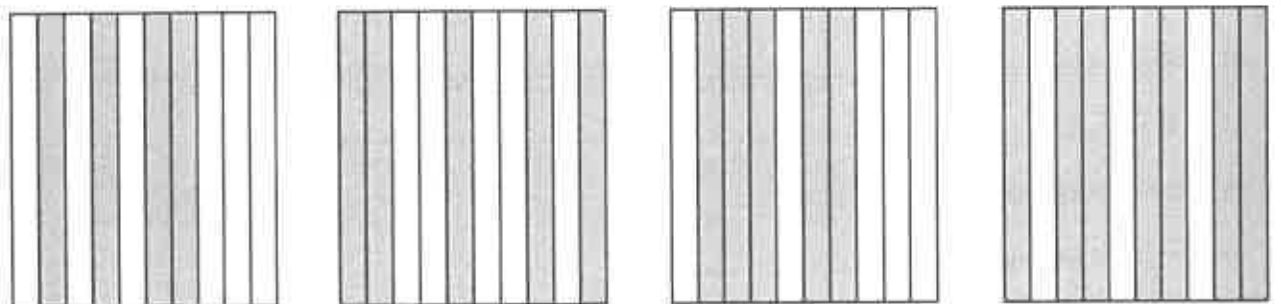


_____ tenths = _____



_____ tenths = _____

BONUS ▶



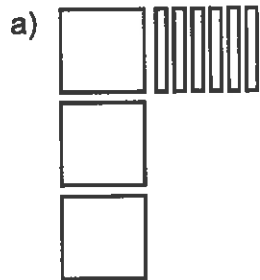
_____ tenths = _____

NS4-55 Comparing and Ordering Numbers—to Tenths

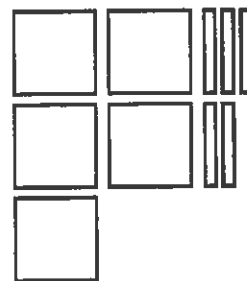
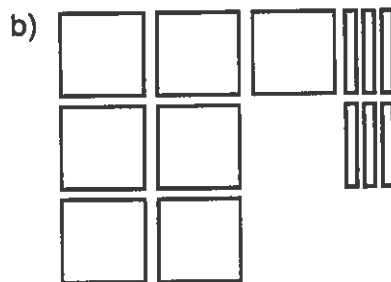
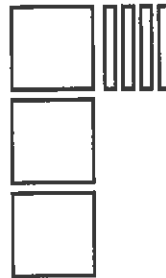
$$\square = 1$$

$$\text{rod} = 0.1$$

1. Write the number for each base ten model using numerals (in the box). Then circle the greater number in the pair.



3.6



- c) Explain how you knew which number in part a) was greater.

2. Draw base ten models for the pair of numbers. Then circle the greater number.

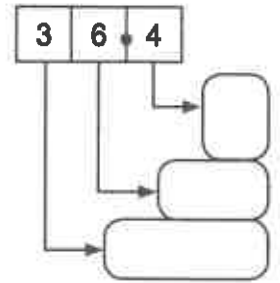
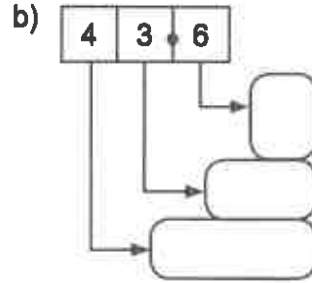
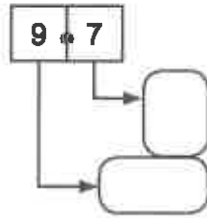
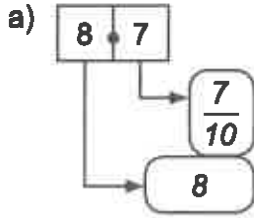
a) nine and seven tenths

7.9

b) twelve and eight tenths

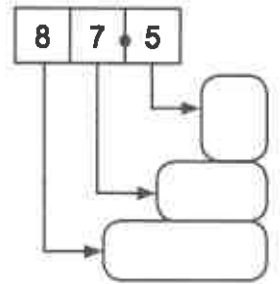
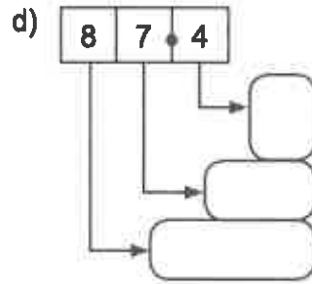
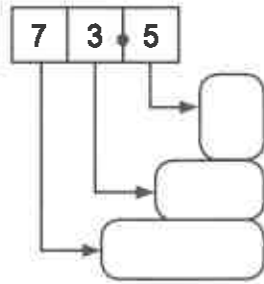
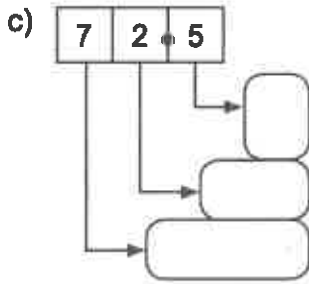
8.2

3. Write the value of each digit. Then complete the sentence.



_____ is greater than _____.

_____ is greater than _____.



_____ is greater than _____.

_____ is greater than _____.

4. Circle the digits that are different in the pair of numbers. Then write the greater number in the box.

a) 247.5
246.5

b) 136.0
126.0

c) 4852.5
4858.5

d) 632.5
732.5

5. Read the numbers from left to right. Circle the first pair of digits you find that are different. Then write the greater number in the box.

a) 4323.3
4332.3

b) 5090.7
5900.7

c) 756.2
776.8

BONUS ▶ 12 146.6
12 086.4

6. Circle the greater number.

a) 8147.6 9147.6

b) 352.1 325.9

c) 5098.1 5089.9

7. Write "<" (less than) or ">" (greater than) in the box to make the statement true.

a) 6726.2 6726.6

b) 788.8 788.7

c) 4303.2 3403.9

